

Certified Mail

April 26, 2010

Mr. Shawn Ghose, EPA Project Coordinator Superfund AR/LA Enforcement Section (6FF-RA) U.S. Environmental Protection Agency 1445 Ross Avenue Dallas, Texas 75202

Subject: Monthly Progress Report – March 2010 and 2009 Annual Report Arkwood, Inc. Site, Omaha, Arkansas

Dear Mr. Ghose:

Pursuant to Section IX (B) of the corrected Consent Decree in this matter, the following letter report is Millbrook Distribution Services' (MMI) monthly progress report. The 2009 Annual Report is also enclosed.

I. CURRENT ACTIVITIES

The following is a general description of Work (as defined in the Consent Decree) activities commenced or completed during this reporting period:

During March, we operated the treatment system, collected operational samples and conducted Site maintenance activities. Water samples were collected on March 15, 2010. Ms. Dianna Kilburn and Ms. Marilyn Egan of the ADEQ are provided with regular updates as analytical data becomes available. A summary of the data is attached for reference. Samples at the spring mouth and weir will continue to be collected once a month.

The pilot system continues to undergoing repairs. Although the pilot system has been inoperable for the past several months, the concentration of PCP at the mouth of New Cricket Spring has remained low. We will continue to move forward on repairs to the pilot system but will hold off on restarting the pilot system to allow for further evaluation of current site conditions.

II. PROJECT DATA Attached.

III. PROJECTED ACTIVITIES

April: MMI plans to continue ongoing operations and Site maintenance activities.

May: MMI plans to continue ongoing operations and Site maintenance activities. June: MMI plans to continue ongoing operations and Site maintenance activities.

IV. PROBLEMS ENCOUNTERED OR ANTICIPATED

The analytical laboratory experienced some equipment problems that delayed the sample analyses. The samples were extracted within the appropriate holding time but not analyzed until April 18, 2010.

I certify that the information contained in or accompanying this submission is true, accurate, and complete to the best of my knowledge, information and belief, and that I, as project coordinator, have made reasonable inquiry into its veracity.

If you have any questions regarding this monthly progress report, please do not hesitate to contact me at (608) 848-4134.

Sincerely,

Jean A. Mescher, Project Coordinator Director, Environmental Services

Enclosure

Copy:

- Dianna Kilburn, ADEQ*
- EPA Assistant Regional Counsel (6C-WA)* (w/o enclosure)
- Chief, Superfund Enforcement Branch (6H-E)* (w/o enclosure)
- Frank Robinson, McKesson Corporation. (w/o enclosure)

^{*} CERTIFIED MAIL

Arkwood, Inc. Site: Ozone Injection Pilot Study

	\/i-	lal	Our minutes	5.	30
Date	Varia Water Inj	O3 Ini	Spring Flow	Mouth	OP Weir
12/8/05	vvaler in	03111		WOULT	vveii
12/9/05	35		5 5		
12/14/05	35	1lb/10 g	21	28	
12/15/05	35	1lb/10 g	30/27	29.3	
12/20/05	36			7.39	<5.10
12/26/05	36	1lb/10 g 1lb/10 g	27 27	11.4	11.1
1/2/06	36	1lb/10 g	21	42.4	35.1
1/9/06	36	1lb/10 g		32.4	33
1/16/06	36	1lb/10 g	20 27.5	32.3	<5.00
1/23/06	36	1lb/10 g		15.9	
1/30/06	36	1lb/10 g	34/32 41	34.3	<5.00 <5.00
2/6/06	36		38		<5.00
2/13/06	36	1lb/10 g 1lb/10 g	34	<5.10 23.9	<5.00 <5.00
2/20/06	36	1lb/10 g	21	5.53	4.19J
2/27/06	36	1lb/10 g	26	19.9	<5.00
3/6/06	34	1-2lb/10 g	16	25.1	<5.00
3/13/06	33	1-2lb/10 g	57	107	<5.00
3/20/06	32	1-2lb/10 g	48	26.2	<5.00
3/27/06	32 32	1-2lb/10 g	27	4.09J	<5.00
4/3/06	34	2-3lb/10 g	24	11.3	<5.00
4/10/06	33	2-3lb/10 g	16.4	39.3	<5.00
4/17/06	34	2-3lb/10 g	22	7.94	7.82
4/24/06	35	2-3lb/10 g	16	7.0	<5.00
4/27/06	33	2-3lb/10 g	50	11.3	NA
4/29/06	33	2-3lb/10 g	. 193	28.2	NA
5/1/06	33	2-3lb/10 g	94	23.4	7.16
5/8/06	33	2-3lb/10 g	59	52.3	23.3
5/15/06	34	2-3lb/10 g	21.7	14.9	<5.00
5/22/06	34	2-3lb/10 g	16	<5.00	<5.00
5/30/06	34	2-3lb/10 g	16.7	5.64	<5.00
6/7/06	0	0	3	253	<5.00
6/12/06	0	0	2.19	LE	LE
6/19/06	34	0	16.7	52.1	14.3
6/26/06	34	0	16.7	74.7	<5.00
7/5/06	35	0	21.7	9.8	<5.00
7/17/06	34	0	16.7	21.9	4.01J
8/7/06	34	0	16.7	23.6	18
8/14/06	34	0	16.7	<5.00	5.22
9/5-6/06	34	0	23	6.57	<5.10
9/18/06	34	ő	24	6.29	<5.00
10/2/06	34	ō	24	16.8	<5.00
10/16/06	34	2-3lb/10 g	41	39.6	2.22J
10/16/06	34	5-6lb/10g	81	92.3	19.4
10/18/06	34	5-6lb/10g	27	118	<5.00
11/7/06	35	2-4lb/10g	41	52.7	4.70J
11/20/06	35	2-4lb/10g	- 24	57.4	<5.00
11/30/06	35	5-6lb/10g	636	<50.0	<5.00
12/4/06	35	5-6lb/10g	59	<54.3	<5.00
12/6/06	35	5-6lb/10g	37	<52.6	<5.00
12/18/06	35	2-3lb/10 g	21	24.1	<5.00
1/8/07	35	2-3lb/10 g	21	16.7	<5.00
1/22/07	35	2-3lb/10 g	79	34.6	<5.00
2/5/07	35	2-3lb/10 g	27	25.9	<5.00
2/19/07	35	2-3lb/10 g	47	19.6	<5.00
3/5/07	35	2-3lb/10 g	27	<5.00	<5.00
3/19/07	35	2-3lb/10 g	25	NA	NA
4/9/07	35	2-3lb/10 g	23	<5.00	<5.00
4/23/07	35	2-3lb/10 g	30	7.27	<5.00
5/7 <i>1</i> 07	35	2-3lb/10 g	21	2.90J	<5.00
5/21/07	35	2-3lb/10 g	20	4.36J	<5.00
6/4/07	35	2-3lb/10 g	20	<5.00	<5.00
6/18/07	35	0	21	9.62	<5.00

7/9/07	35	0	20	15.0	<5.00
7/23/07	35	0	18	8.65	<5.00
8/6/07	0	Ō	1	191	9.19
9/10/07	35	0	23	217	26.4
9/24/07	35	0	18	16.2	19.4
10/10/07	35	2-3lb/10 g	18	5.63	1.15J
10/22/07	35	2-4lb/10g	18	1190	53.7
11/5/07	35 35	2-4lb/10g	18	209	7.93
11/19/07	35	2-4lb/10g	18	19.8	
12/3/07	35	2-4lb/10g	18	20.1	24.1 <5.00
12/17/07	36	2-4lb/10g	32	87.4	1.20J
1/7/08	36	2-4lb/10g	23		
1/21/08	36	2-4lb/10g	23	<5.00 58	<5.00 <5.00
2/4/08		2-4lb/10g			<5.00
	36 35		24	52	<5.00
2/18/08		2-4lb/10g	83	57	15
3/3/08	35 35	5-6lb/10g	580	<5.00 11	<5.00
3/17/08		5-6lb/10g	44		<5.00
4/7/08	35	5-6lb/10g	78	10	<5.00
4/12/08	35	5-6lb/10g	240	6.5	NA NA
4/13/08	35	5-6lb/10g	100	6.8	NA NA
4/14/08	35	5-6lb/10g	78	8.2	NA .
5/10/08	36	5-6lb/10g	68	75	<5.00
5/27/08	0	0	18	189	<5.00
6/9/08	35	2-4lb/10g	30		<5.00
6/23/08	35	2-4lb/10g	580	5.6	<5.00
7/7/08	35	2-4lb/10g	80	194	189
7/10/08	35	5-6lb/10g	140	254	20
7/21/08	35	5-6lb/10g	42	477	<5.00
8/4/08	35	2-4lb/10g	22	108	14
8/18/08	35	2-4lb/10g	36	31	<5.00
9/1/08	35	2-4lb/10g	25	32	<5.00
9/22/08	35	2-4lb/10g	40	22	<5.00
10/6/08	35	2-4lb/10g	21	20	<5.00
10/20/08	33	2-4lb/10g	21	13	<5.00
11/3/08	35	2-4lb/10g	24	<5.00	<5.00
11/17/08	35	2-4lb/10g	30	28	<5.00
12/1/08	35	2-4lb/10g	24	12	<5.00
12/22/08	33	2-4lb/10g	24	<5.00	<5.00
1/5/09	35	2-4lb/10g	32	7.3	<5.00
1/26/09	32	2-4lb/10g	27	<5.00	<5.00
2 <i>/</i> 9/09	33	2-4lb/10g	90	<5.00	<5.00
2/23/09	33	2-4lb/10g	31	6	<5.00
3/9/09	34	2-4lb/10g	30	5.7	<5.00
3/23/09	33	2-4lb/10g	30	<5.00	<5.00
4/6/09	32	2-4lb/10g	38	5.8	<5.00
4/20/09	32	2-4lb/10g	243	8.5	<5.00
5/4/09	33	2-4lb/10g	343	8.2	8.7
5/18/09	33	2-4lb/10g	51	6.2	<5.00
6/8/09	35	2-4lb/10g	38	<5.00	<5.00
6/29/08	33	2-4lb/10g	25	9.1	<5.00
7/20/09	32	2-4lb/10g	47	39	<5.00
8/10/09	32	2-4lb/10g	23.7	31	<5.00
9/13/09	32	0	22	8	<5.00
10/12/09	32	0	104	21	<5.00
11/9/09	32	0	45	<50	<5.00
12/7/09	32	0	28	8.2	<5.00
1/10/10	32	0	42	13	<5.00
2/15/10	32	0	87	11.1	<5.00
3/15/10	32	0	35	<5.00	<5.00
NOTES.					

NOTES: Flow rates in gallons per minute (gpm)
O3 injection rates in pounds per 10 gallons
PCP concentrations in parts per billion (ppb)

NA - not analyzed

LE - Lab Error - samples not usable



MMET, Inc • 3889 N. 20th Street • Ozad, MO 65721 tel: 447-584-MMET • Lax: 447-582-0269 • tall: 877-584-MMET

mmetinc@classicnet.net

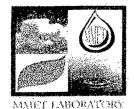
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leport Nu	mber:	M140259			Report Date:	4/22/2010	
ab Numb	er:	100453					
an ivener:	McKesson	1 Corp.			Project Manager:	Jean Mescher	
Justomer.	1 Post St	reet, 11th Floor			Project Name:	New Cricket Sprit	ıg
		cisco, CA 94104			Project Location:	Arkwood, AR	
	608-848-				Sample Matrix:	Water	
hone	608-848-				Sampled By:	Randy Curtis	
Fax	000		·		Sample ID:	Mouth	
Cell	iean mes	scher@mckesson.com			Date Sampled:	3/15/2010	800
Email	1000000				Date Received	3/15/2010	1016
Parameter		Method				Analysis Date	Analyst
extraction		EPA 3510C				3/28/2010	WAM
241.00							
Analyte		Method	Result	Units	MQL	Analysis Date	Analyst
Pentachio	rophenol	ЕРА 8270С	< 5.00	ug/L	5.00	4/18/2010	WAM
O		<u> </u>	Percent Recovery			Analysis Date	Analyst
Surrogate 2-Fluoropi			45	%		4/18/2010	WAM
			31	%		4/18/2010	WAM
Phenol-do	romphenol		0	%		4/18/2010	W/AM

Report Approved by:

Wayn A. Middleton, Pres., Lab Dir.



MMET, Inc # 3889 N. 20th Suget # Oznk, MO 65721 tet: 417-501-MMET # fax: 417-582-0207 # tota: 857-581-MMET

mmelinc@classicnet.net

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LABORATORY REPORT

			LABORATORI REI	PORT			
Report N	Number:	M140259			Report Date:	4/22/2010	
Lab Nun	nber:	100454					
Custome	er: McKesso	n Corp.			Project Manager:	Jean Mescher	
	1 Post St	reet, 11th Floor			Project Name:	New Cricket Spri	ng
	San Fran	cisco, CA 94104			Project Location:	Arkwood, AR	•
Phone	608-848-	4134			Sample Matrix:	Water	
Fax	608-848-	4136		•	Sampled By:	Randy Curtis	
Cell					Sample ID:	Weir	
Email	jean.me	scher@mckesson.com			Date Sampled:	3/15/2010	810
	133700000	kayamayaya, Sisanta shiya Pilanta sa ara antika t irir seka ti kamama n ada yaka da ma			Date Received	3/15/2010	1016
Paramete	ег	Method		***************************************		Analysis Date	Analyst
Extraction	ท	EPA 3510C				3/28/2010	WAM
Analyte		Method	Result	Units	MQL	Analysis Date	Analyst
•	prophenol	EPA 8270C	< 5.00	ug/L	5.00	4/18/2010	WAM
Surrogat	te		Percent Recovery			Analysis Date	Analyst
2-Fluorop			10	%		4/18/2010	WAM
Phenol-de			16	%		4/18/2010	WAM
2,4,6-Tril	bromphenoi		0	.%		4/18/2010	WAM

Report Approved by:

Wayne A. Middleton, Pres., Lab Dir.

CHAIN OF CUSTODY MMET, Inc.Middleton Microbiological & Environmental Testing Laboratory, 3889 N. 20th (Hwy 65) Ozark, MO 65721, Toll Free 1-877-581-MMET(6638), Fax 417-582-0269 Sampler Signature Analysis Requested Project Name Project No. **New Cricket Spring** and court 140259 Arkwood PCP Jean Mescher Project Manager McKesson Corp Company Name 1 Post Street, 11th floor Address San Francisco, CA 94104 City, State, Zipcode 608-848-4134 / 608-848-4136 Phone / Fax Pager / Cellular Phone iean,mescher@mckesson.com email address Preservative Collection Sample Type Sample C (Comp) W (Water), A (Air) Type & (metals) General Microbial Industrial Date & Sample Lab Hygiene S (Soil), Other Chemistry Mold, Fungi Remarks Time G (Grab) Container Inorganics **Organics** Other ID ID 1L Glass Water G (Grab) Mouth 3-15-10 8:00 X G (Grab) Water 1L Glass Weir 3-15-10 8:10 35 CPM Pilot Plant

50 %

2. 6 G-41=11 Date & Time Received by: Sign Remarks Relinguished by: Sign. 3-15-10 Flow Date & Time Received by: Sign Relinquished by: Sign. Dslvd Oxygen Regeived by Lab: Sign

ANN Midd Phon Date & Time 1016 Relinquished by: Sign. 3-15-10

ARKWOOD, INC. SITE

Omaha, Arkansas

ACTIVITY REPORT – XIII

January 2009 - December 2009

Prepared By: R2P5 Environmental, Inc. (408) 247-3806

J	Introduction	
2	Objectives	
3	Rainfall	
4	New Cricket Water Flow	
5	Injection Wells	
6	Analytical Data	
7	Equipment Operations	
3	Conclusions	
9	Appendix A	
100	Appendix B	

ARKWOOD

1.0 INTRODUCTION

This report presents a summary of the activities at the Arkwood Site (Site) for the time period of January 2009 to December 2009. This is the annual activity report for the Site following source removal. The Site is located northwest of the intersection of Old Highway 65 and Cricket Road in Omaha, Arkansas. Soil remediation for the Site was completed in 1995 and recognized by the EPA and the State of Arkansas at the soil completion ceremony in July of 1996.

This Site is made up of a main approximately 20-acre area where formerly wood-treating and treated-wood storage occurred. A spring, New Cricket Spring, is approximately ¼ mile down the valley from the main area and impacted by pentachlorophenol (PCP). Following source removal, activities have continued at the Site to evaluate concentrations of PCP at New Cricket Spring and to operate a remediation system that treats the water emanating from New Cricket Spring prior to release to Cricket Creek.

A pilot water injection system was installed in late 2005 at the Site. The pilot system injects ozonated water into the subsurface beneath the Arkwood Site to a depth of approximately twenty-five feet to treat residual concentrations of PCP that impact New Cricket Spring.

ARKWOOD

2.0 OBJECTIVES

The goal of this report is to present the analytical results, analysis, and knowledge gained during the past year at the Site. Data and graphical presentations are included to allow an understanding of the residual PCP impact to the nearby New Cricket Spring following soil remediation (source removal) at the site in 1994 and 1995.

Analytical data from spring samples, major storm events and the pilot injection system operating results have been tabulated and presented for evaluation and review.

ARKWOOD

3.0 RAINFALL

High levels of rainfall continued to be recorded for the Arkwood area in 2009 following high rainfall amounts recorded in 2008. Normal rainfall in the past has averaged 45 inches per year. Rainfall of 70 inches per year was recorded in 2008 followed by 56 inches recorded in 2009. Review of the data in Table 3.1 shows that the majority of the rainfall in 2008 fell in the first nine months of the year while the greatest increase of rainfall recorded in 2009 fell in the fall during September and October. The high rainfall levels contributed to the high water flows recorded at the outfall of New Cricket Spring. New Cricket Spring water flows are presented in Section 4.0.

Following five years of drought between 2003 and 2007 and low water flows in New Cricket Spring, the increase in rainfall the past two years has provided the highest annual water flows for New Cricket Spring since Arkwood records were initiated in 1996. After monthly rainfall above average for most of 2009, rainfall fell to below average for November and December. It is anticipated that New Cricket Spring flows will respond accordingly with average or below average flows for early months of 2010. Rainfall for 2008 and 2009 can be viewed in Table 3.1 and Figure 3.1.

It is believed that the high water flow through New Cricket Spring for the past two years has enhanced the operation of the pilot system and enhanced the effectiveness of the injection of ozonated water into the flow channel of New Cricket Spring. The increase in water flow has provided increased water flow throughout the affected zone of the Site. Analytical results for the past year are presented in Section 6.0.

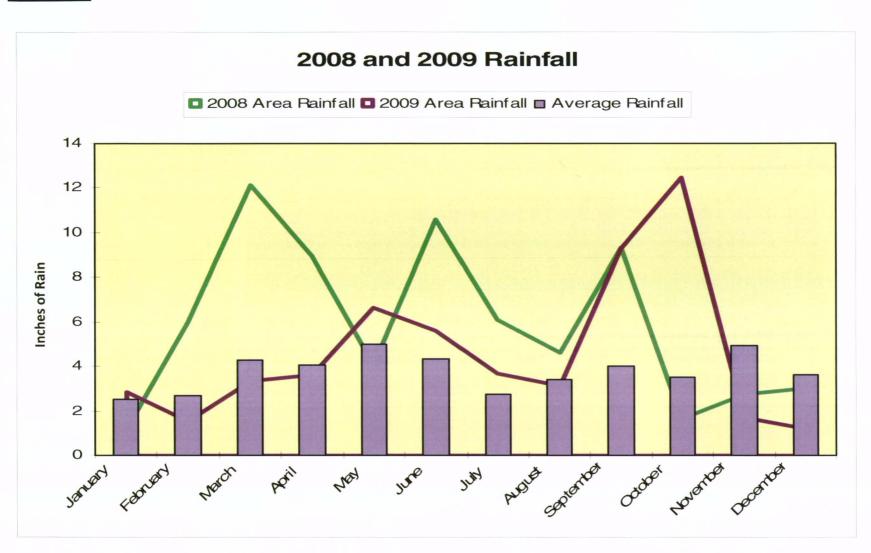
Prepared by R2P5 Environmental, Inc. *ARKWOOD*

Table 3.1 RAINFALL

Month	2009 Area	2008 Area	Average
	Rainfall	Rainfall	Rainfall
January	2.85	1.2	2.51
February	1.51	6.01	2.71
March	3.34	12.13	4.29
April	3.65	8.94	4.09
May	6.62	4.06	5.01
June	5.59	10.61	4.34
July	3.66	6.09	2.72
August	3.12	4.63	3.41
September	9.28	9.31	4.03
October	12.49	1.63	3.5
November	1.68	2.76	4.96
December	1.2	3.04	3.63
Total	55.94	70.55	45.20

Reference www.cocorahs.org

Figure 3.1



4.0 NEW CRICKET WATER FLOW

As expected, the water flow through New Cricket Spring responded to the high rainfall levels reported in Section 3.0. New Cricket Spring peak water flows were the highest recorded in recent history. Following a number of lower than normal years, the average water flows returned to levels similar to conditions recorded in 1998. Exceptionally high flows were recorded in July, September, and October of 2009.

Figure 4.1 presents New Cricket Spring annual average water flows for 1996 through 2009. The water flows presented in Table 4.1 have been adjusted for the effect of injected water at the site. The injected water accounts for approximately 20 gallons per minute as measured at New Cricket Spring. The average flow at New Cricket Spring for the months of January and December 2009 was 59 gallons per minute. This flow is high compared to past years and exceeds the flow recorded in 1998. New Cricket Spring flows for the past 14 years can be viewed on Figure 4.1. The flows recorded during 2008 and 2009 are similar to flows recorded in 1996, 1997, and 1998. This may indicate that flows are returning to normal levels following years of drought.

The high water flows through New Cricket Spring the past two years (2008 and 2009) continue to flush the underground flow channels. Analytical data collected at the spring mouth or outlet is presented in Section 6.0.

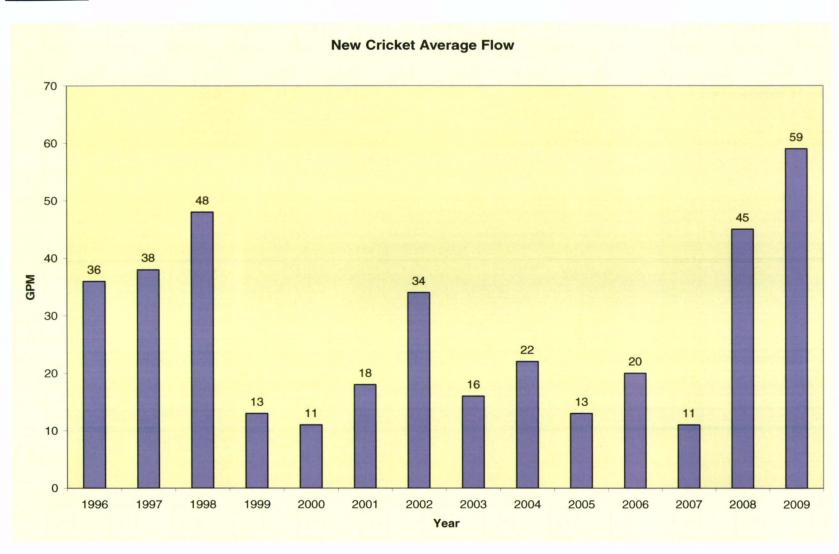
ARKWOOD

Table 4.1

New Cricket Spring Average Flow Rates (gpm) 1996-2009

	1996	1997	1,998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
JAN		29	179	3	10	7	16	26	24	16	28	63	3	7
FEB		104	76	2	3	50	16	19	30	28	30	19	33	10
MAR		115	127	8	2	14	63	24	27	22	37	19	148	20
APR		42	36	5	8	5	70	15	22	12	85	14	121	94
MAY	15	18	40	8	5	5	59	22	23	9	41	4	23	95
JUN	6	21	9	84	8	5	95	20	16	2	20	2	100	39
JUL	12	12	9	6	84	17	18	12	21	6	22	0	78	120
AUG	7	12	20	6	1	8	8	5	17	7	21	. 0	9	12
SEP	50	16	12	5	1	6	8	2	12	13	31	0	12	130
OCT	12	13	20	9	1	10	8	10	32	23	8	0	1	.146
NOV	127	30	12	6	2	9	27	22	50	8	78	0	6	28
DEC	58	41	33	13	4	74	23	17	12	5	16	5	4	5
AVG	36	38	48	13	11	18	34	16	22	13	20	11	45	59

Figure 4.1



ARKWOOD

5.0 INJECTION WELLS

There are nine injection points in the vicinity of the former sinkhole on the main site. Ozonated water was injected into Well G during 2009.

ARKWOOD

6.0 ANALYTICAL DATA

Water samples were collected for analytical testing on a bimonthly basis for the first six months and monthly thereafter at the mouth of New Cricket Spring and at the weir of the outlet from the treatment system for the Arkwood site during 2009. Water emanating from New Cricket Spring continues to be treated with ozone in the Arkwood Primary Treatment System before being released to New Cricket Creek. Analytical data collected during 2009 can be viewed in Table 6.1. Data from 2008 is included in Appendix A.

All analytical data collected at the weir was below the detection level of 5.00 ppb with the exception of 8.7 ppb measured during the May sampling. The May sampling occurred during installation of the new air compressor for the primary treatment system at a time when the new air compressor was being calibrated into the existing ozone treatment system. Data collected at the mouth of New Cricket Spring continues to show levels at or slightly above the proposed cleanup levels for the Site which is an allowable monthly average of 9.3 ug/l PCP and a daily maximum of 18.7 ug/l. Values of PCP concentrations for January through July varied between non-detect and 39 ppb which was recorded in July of 2009.

There were some problems with operation of the pilot system including a temporary shutdown during July with the air compressor providing intermittent service and therefore interrupting the production of ozone. The pilot system was inoperable for a couple of days in September due to an air compressor malfunction. Operation of the pilot system was discontinued in October due to an electrical failure and was not restarted by the end of the December 2009. Non-ozonated water continues to be injected at the Site to provide efficient operation of the primary treatment system located at New Cricket Spring. It is significant to note that the levels of PCP recorded at the mouth of New Cricket Spring have continued to stay low during September through December even with the pilot system shut down.

Table 6.1 ARKWOOD ANALYTICAL DATA 2009

	Pilot Injection	Pilot O3	NCS Flow	NCS-PCP	Weir PCP
	Flow			ppb	ppb
1/5/09	35	2-4lb/10g	32	7.3	<5.00
1/26/09	32	2-4lb/10g	27	<5.00	< 5.00
2/9/09	33	2-4lb/10g	90	<5.00	<5.00
2/23/09	33	2-4lb/10g	31	6	<5.00
3/9/09	34	2-4lb/10g	30	5.7	<5.00
3/23/09	33 .	2-4lb/10g	30	<5.00	< 5.00
4/6/09	32	2-4lb/10g	38	5.8	<5.00
4/20/09	.32	2-4lb/10g	243	8.5	<5.00
5/4/09	33	2-4lb/10g	343	8.2	8.7
5/18/09	33	2-4lb/10g	51	6.2	<5.00
6/8/09	35	2-4lb/10g	38	<5.00	<5.00
6/29/09	33	2-4lb/10g	25	9.1	<5.00
7/20/09	32	2-4lb/10g	47	39	<5.00
8/10/09	32	2-4lb/10g	23.7	31	<5.00
9/13/09	32	0	22	8	< 5.00
10/12/09	32	0	104	21	<5.00
11/9/09	32	0	45	<50	<5.00
12/7/09	32	0	28	8.2	<5.00

NOTES:

Flow rates in gallons per minute (gpm)

O3 injections rates in pounds per 10 gallons PCP concentrations in parts per billion (ppb)

NA - not analyzed

LE – Lab Error – samples not usable

7.0 **EQUIPMENT OPERATIONS**

Equipment operations consisted of operating the pilot ozone injection system through September, operating the primary treatment system adjacent to the mouth of New Cricket Spring, and maintenance of the facilities located at the Site. Both the primary and pilot systems effectively treat the PCP that is present prior to discharge to Cricket Creek. The effectiveness of the Primary Treatment System can be reviewed by reference to the analytical data collected at the discharge weir. The water at the weir is the effluent from the primary treatment system. Table 6.1 is a summary of the analytical data collected during this past year. The Primary Treatment System continues to operate efficiently for the Site. A new air compressor was installed during spring of 2009. The new air compressor supplies a consistent volume to drive the ozone generating system and has improved the efficiency of the primary system and reduced maintenance problems.

Operation of the pilot system occurred from January through September with minor shutdowns for repairs in June, July, and September. During July and September, the air compressor was shut down for a couple of days for repairs. Subsequent to resolution of the air compressor problems, the electronics of the system failed in October. Continued efforts to repair and replace electronic components have not retuned the unit to service. Work continues with discussions with the equipment manufacturer and technicians to resolve these issues. It is anticipated that the unit will be capable of returning to service in 2010.

It is believed that cycling the pilot system has affected the operating characteristics of New Cricket Spring. The levels of PCP at New Cricket Spring have varied between 8.2 and 21 ppb during the pilot system shutdown. The operation of the pilot system was addressed in a letter from Ms. Jean Mescher to Mr. Shawn Ghose and is included in Appendix B. The letter indicates that analytical data will continue to be collected and reviewed with the pilot system down and non-ozonated water will continue to be injected into wells near the former sinkhole at the Site. The letter recommends capture of a storm event prior to considering restarting of the pilot system.

ARKWOOD

8.0 CONCLUSIONS

High levels of rainfall during September and October of 2009 contributed to the high water flows recorded through New Cricket Spring this past year.

The Arkwood Primary Treatment System continued to effectively treat water at the outfall of New Cricket Spring prior to the release into New Cricket Creek.

APPENDIX A

ARKWOOD ANALYTICAL DATA 2008

	Pilot Injection	Pilot O3	NCS Flow	NCS-PCP	Weir PCP
	Flow			ppb	ppb
10/10/07	35	2-31b/10g	18	5.63	1.15J
10/22/07	35	2-4lb/10g	18	1190	53.7
11/5/07	35	2-4lb/10g	18	209	7.93
11/19/07	35	2-4lb/10g	18	19.8	24.1
12/3/07	35	2-4lb/10g	18	20.1	<5.00
12/17/07	35	2-4lb/10g	32	87.4	1.20J
1/7/08	35	2-4lb/10g	23	<5.00	<5.00
1/21/08	35	2-4lb/10g	23	58	<5.00
2/4/08	35	2-4lb/10g	24	52	<5.00
2/18/08	35	2-4lb/10g	83	57	15
3/3/08	35	5-6lb/10g	580	<5.00	<5.00
3/17/08	35	5-6lb/10g	44	11	< 5.00
4/7/08	35	5-6lb/10g	78	. 10	<5.00
4/12/08	35	5-6lb/10g	240	6.5	NA
4/13/08	35	5-6lb/10g	100	6.8	NA
4/14/08	35	5-6lb/10g	78	8.2	NA
5/10/08	.36	5-6lb/10g	68	75	<5.00
5/27/08	0	0	18	189	< 5.00
6/9/08	35	2-4lb/10g	30	77	<5.00
6/23/08	35	2-4lb/10g	580	5.6	<5.00
7/7/08	35	2-4lb/10g	80	194	189
7/10/08	35	2-4lb/10g	140	254	20
7/21/08	35	2-4lb/10g	42	477	<5.00
8/4/08	35	2-4lb/10g	22	108	14
8/18/08	35	2-4lb/10g	36	31	<5.00
9/1/08	35	2-4lb/10g	25	32	<5.00
9/22/08	35	2-4lb/10g	40	22	<5.00
10/6/08	35	2-4lb/10g	21	20	<5.00
10/20/08	33	2-4lb/10g	21	13	<5.00
11/3/08	35	2-4lb/10g	24	<5.00	<5.00
11/17/08	35	2-4lb/10g	30	28	<5.00
12/1/08	35	2-4lb/10g	24	12	<5.00
12/22/08	33	2-4lb/10g	24	<5.00	<5.00
NOTES	Til				

NOTES:

Flow rates in gallons per minute (gpm)

O3 injections rates in pounds per 10 gallons

PCP concentrations in parts per billion (ppb)

NA - not analyzed

LE - Lab Error - samples not usable

ARKWOOD APPENDIX B

McKesson Corporation One Post Street, 34th Floor San Francisco, CA 94104 608.848.4134 Tel Jean A. Mescher
Director, Environmental Services

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Via Electronic Mail January 20, 2010

Mr. Shawn Ghose, EPA Project Coordinator Superfund AR/LA Enforcement Section (6FF-RA) U.S. Environmental Protection Agency 1445 Ross Avenue Dallas, Texas 75202

Subject: Pilot System Operations Arkwood, Inc. Site, Omaha, Arkansas

Dear Mr. Ghose:

At the request of Ms. Marilyn Egan, the purpose of this letter is to provide additional information about our plans for operation of the pilot system at the Arkwood, Inc. Site. As discussed in the monthly reports, the pilot system operated intermittently in October and stopped operating in November due to an electrical malfunction and is undergoing repairs; however, non-ozonated water continues to be injected at the main site near the former sinkhole. Although the pilot system has been inoperable, the concentration of PCP at the mouth of New Cricket Spring has remained low with Pentachlorophenol (PCP) concentrations of 21 ppb, <50 ppb, 8.2 ppb and 13 ppb for October, November, December and January, respectively.

We will continue to move forward on repairs to the pilot system; however, it is recommended that we wait to restart the pilot system until after at least one significant rainfall event where the flow at the spring exceeds 500 gallons per minute. This will give us the opportunity to monitor for potential rebound of PCP concentrations at the spring mouth. Based upon the progress of the repairs and the analytical results following the significant participation event, we will make a recommendation about operation of the pilot system.

If you have any questions regarding this letter, please do not hesitate to contact me at (608) 848-4134.

Sincerely,

Jean A. Mescher, Project Coordinator Director, Environmental Services

Copy: Marilyn Egan, ADEQ

7007 2560 0002 8380 9362



McKesson Corporation McKesson Real Estate One Post Street San Francisco, CA 94104

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Empowering Healthcare

Dianna Kilburn Arkansas Department of Environmental Quality (ADEQ) 5301 Northshore Drive North Little Rock, AR 72118-5317